

What is claimed is:

1. A packet switching apparatus accommodating a group of first communication lines of different access methods for performing communication with subscriber
5 terminals and a second communication line for connection to the Internet, comprising:

a basic module disposed in the apparatus casing;

and

an additional module disposed on the outside of
10 the apparatus casing, and

said basic module comprising:

a plurality of packet processors each for performing a predetermined protocol process on communication packets;

15 a switch for switching packets among said packet processors;

a first line interface connected between one of said packet processors and a communication line having a specific access method in said first communication
20 lines;

a second line interface connected between one of said packet processors and said second communication line; and

a control processor connected to each of the above
25 elements,

wherein said additional module is connected between one of said packet processors and a communication line having an access method different from said specific access method in said first
5 communication lines and performs a process peculiar to said access method on a transmission and received signal.

2. The packet switching apparatus according to claim
10 1, wherein one of said packet processors has a PPP (Point to Point Protocol) process function and an IP (Internet Protocol) layer processing function for performing communication with an Internet service provider.

15 3. The packet switching apparatus according to claim 1, wherein the communication line having said specific access method is an ISDN.

4. The packet switching apparatus according to claim
20 1, wherein the communication line connected to said additional module is any of an analog circuit, an ADSL (Asymmetric Digital Subscriber Line), and a CATV line.

5. The packet switching apparatus according to claim
25 1, wherein said additional module has means for

communicating control information with said control processor.

6. The packet switching apparatus according to claim

5 1, wherein said first line interface is detachably connected to said packet processor.

7. A packet switching apparatus accommodating first communication lines connected to subscriber terminals
10 and a second communication line connected to the Internet, comprising:

a basic module disposed in the apparatus casing;

and

15 an additional module disposed on the outside of the apparatus casing, and

said basic module comprising:

a plurality of packet processors each for performing a predetermined protocol process on communication packets;

20 a switch for switching packets among said packet processors;

a line interface connected between one of said packet processors and one of said first communication lines; and

25 a control processor connected to each of the above

elements,

wherein said additional module is connected between one of said packet processors and said second communication line and has a packet processing function peculiar to communication service on said second communication line.

8. The packet switching apparatus according to claim 7, wherein said additional module has means for encrypting and decrypting the contents of packets communicated on said second communication line.